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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------------------|---------------------|------------------|
| 10/781,113 | 02/18/2004 | Clemens Johannes Maria De Vroome | A-3904 | 1963 |
| 24131 | 7590 | 03/25/2005 | EXAMINER | |
| LERNER AND GREENBERG, PA | | | CULLER, JILL E | |
| P O BOX 2480 | | | ART UNIT | PAPER NUMBER |
| HOLLYWOOD, FL 33022-2480 | | | 2854 | |

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/781,113 | Applicant(s) VROOME, CLEMENS JOHANNES MARIA DE | |
| | Examiner Jill E. Culler | Art Unit 2854 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20040218</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5, 7-8, 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,058,844 to Niemiec in view of U.S. Patent No. 4,508,033 to Fischer and U.S. Patent No. 3,875,682 to Justus et al.

With respect to claims 1, 5, 7 and 10-15, Niemiec teaches a printing material web processing machine, in the form of a web-fed rotary offset press, comprising: at least one press cylinder, 16, in the form of a driven, rotating element, for printing a web, 14; a dryer, 18, disposed downstream of said press cylinder, said dryer guiding the web along a path; and a first pull roll, 20, which is a driven, rotating cooling roll, disposed downstream of said dryer for conveying the web along the path with a given tensile stress.

Niemiec does not teach a second pull roll, in the form of a driven, rotating element, disposed downstream of said press cylinder and upstream of said dryer for separating the web from said press cylinder; or a second apparatus for driving said pull roll, said second apparatus driving said first pull roll at a rotational speed being reduced as compared with a rotational speed of said press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder.

Fischer teaches a printing press having a pull roll, 14, 15, which is a driven, rotating element, disposed downstream of a press cylinder, 5, and upstream of a dryer, 8, for separating the web from the press cylinder.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll of Fischer with the printing machine of Niemiec in order to more smoothly transition the web from the printing press cylinders into the dryer.

Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder in order to set the tensile stress to a value suitable for conveying the web after separation from the press cylinder. See column 2, line 65 – column 3, line 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll driving apparatus of Justus et al. with the pull roll of Niemiec in order to enhance the tendency of the edge roll to eliminate flutter.

With respect to claims 2 and 8, Niemiec does not teach a third apparatus for controlling the rotational speed of the first pull roll and of the press cylinder, said third apparatus controls the rotational speed of said pull roll to a value below a value of the rotational speed of said press cylinder.

Justus et al. teaches an apparatus for driving a pull roll for a web at a rotational speed being reduced as compared to a rotational speed of a press cylinder. See column 2, line 65 – column 3, line 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the pull roll driving apparatus of Justus et al. with the pull roll of Niemiec in order to enhance the tendency of the edge roll to eliminate flutter.

With respect to claims 16-18 and 22, Niemiec does not teach that the drying path is composed of path parts which follow one another and are oppositely curved, is substantially meander-like, or is substantially sinusoidal.

Justus et al. teaches a drying path composed of path parts which follow one another and are oppositely curved, is substantially meander-like, or is substantially sinusoidal. See Figure 1.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the drying path of Justus et al. with the dryer of Niemiec in order to reduce flutter and improve drying efficiency.

With respect to claims 19 and 20, although Niemiec does not explicitly teach controlling the second tensile stress to a value less than 50 N/m, or controlling the second tensile stress such that the drying path has a radii of curvature following one another of in each case less than 200 mm, these values would appear to be specific to a given application and could be readily determined by routine experimentation.

With respect to claim 21, Niemiec teaches the use of a dryer, 8, through which a temperature of the web along the drying path would increase.

3. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec in view of Fischer and Justus et al. as applied to claims 1-2, 5, 7-8, 10-22 above, and further in view of U.S. Patent No. 6,550,390 to Frankenberger.

Niemiec, Fischer and Justus et al. teach all that is claimed, as in the above rejection of claims 1-2, 5, 7-8, 10-22, except that the first apparatus for separating the web from said press cylinder separates the web from said press cylinder without contact, having at least one element selected from the group consisting of blowing elements and ultrasound elements.

Frankenberger teaches an apparatus for separating a web from a cylinder using ultrasonic waves to separate the web without contact. See column 4, lines 45-60.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Niemiec to use the ultrasonic separation device of Frankenberger in order to be able to separate the web from the cylinder without damage.

4. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec in view of Fischer and Justus et al. as applied to claims 1-2, 5, 7-8, 10-22 above, and further in view of U.S. Patent No. 5,913,471 to Makosch et al.

Niemiec, Fischer and Justus et al. teach all that is claimed, as in the above rejection of claims 1-2, 5, 7-8, 10-22, except that the second pull roll is configured or coated in an ink-repellent manner, at least in some sections.

Makosch et al. teaches a separating roll, 3a, 4a, for a printing press that is configured or coated in an ink-repellent manner. See column 3, lines 25-27.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Niemiec to use the ink repellant separating roll, as taught by Makosch et al. in order to prevent an ink layer from building up.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 1,594,395 to Weston, U.S. Patent No. 1,972,902 to Adolph, U.S. Patent No. 3,220,347 to Luehrs, U.S. Patent No. 3,539,085 to Cline et al., U.S. Patent No. 3,743,154 to Brewitz, U.S. Patent No. 5,184,555 to Quadricci et al. and U.S. Patent No. 6,298,782 to Gregory et al. each teach a printing press having apparent similarities to the claimed subject matter.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec



Daniel J. Colilla
Primary Examiner
Art Unit 2854